

cimen of Cornish architecture. It is built of the moor stone of the county, and is adorned with quatrefoil panelling between string courses in the different stories, niches in the walls, pinnacled buttresses enriched with crockets and finials, and with large blank windows, having mullions and tracery. A sketch of this was a long day's work; and, though afterwards engraved, reflected no credit on the author or the artist. The poor fellow cried, and was really distressed, and I felt as acutely as he possibly could, for I had calculated on having a pleasing companion in such a dreary journey, and also to obtain some correct and satisfactory sketches. On proceeding farther, we had occasion to visit certain Druidical monuments, vast rocks, monastic wells, and stone crosses, on the moors north of Liskeard. Some of these objects my young friend delineated with smartness and tolerable accuracy. We proceeded on to St. Austel, and thence to Ruan-Lany-horne, where we found comfortable and happy quarters in the house of the Rev. John Whittaker, the historian of Manchester, and author of several other literary works. Here we sojourned six days, and quite luxuriated in the comforts of a warm house, a warm reception, the converse of a learned man, who had associated with a Johnson, a Gibbon, a Goldsmith, and other literary comets of the age. Placed in this living by his college, he appeared as if transplanted to a foreign land, amongst a set of uncivilised beings. Fortunately, he had a most estimable domestic wife, and, at the time of our visit, two daughters, aged respectively about sixteen and eighteen. Besides, he possessed a well-stored library, and appeared to be daily occupied in reading and writing. Much of the latter was devoted to criticism; as he was in the habit of supplying two monthly Reviews of the time with able and learned articles. These were the *British Critic*, and the *Anti-Jacobin Review*,—the avowed and uncompromising partisans of "Church and King," the champions of Ministers of State, and ministers of religion. On these subjects, Mr. Whittaker's writings were the most pungent of the class. Being at his house during one Sunday, we accompanied the family to their church, and I can never forget the congregation or the preacher. Excepting two or three of the former class, the remainder were heatmen, with their wives and children; miners also, with their families, and cottagers of the parish. For such a congregation, my learned friend had selected a sermon from his stock, which must have been as unintelligible to his flock as if it had been pronounced in the Hebrew or Chinese language. It was a topographical and archaeological essay on the locality of the natal place of our Saviour—of the sacredness of the spot—of the building which contained the manger—and of the different chapels which had been successively erected to guard and honour the site. Even the architectural styles and character of these buildings were described, in what the preacher thought technical language. Both myself and my young artist were not a little surprised in listening to such a sermon, and to witness such a company; but were told, after dinner, that it was intended only for our ears, and for our understandings. Prout, during his stay at Ruan, made five or six pleasing and truly picturesque sketches, one of which included the church, the parsonage, some cottages mixing with trees, the waters of the river Fall, the moors in the distance, and a fisherman's ragged cot in the foreground, raised against, and mixing with the mass of rocks,—also, a broken boat, with nets, sails, &c. in the foreground. This sketch, with others then made, were presented to the "agreeable and kind Miss Whittakers," as tokens of remembrance. We were obliged to part with these amiable and hospitable friends to proceed on our mission. The next halting-place was Truro, the principal town of the county, where Prout made a sketch of the church, a large building in an open place surrounded by houses. Here again he was embarrassed with the mullioned windows, and other architectural parts, and also with a large extent of iron railing that surrounded the

building. At this place we parted: I to proceed on foot westward, towards the Land's End, &c. and Prout to return by coach to Plymouth. This parting was on perfectly good terms, though exceedingly mortifying to both parties; for his skill as an artist had been impeached, and I had to pay a few pounds for a speculation which completely failed. It will be found in the sequel that this connection and these adventures led to events which ultimately crowned the artist with fame and fortune. I pursued my journey and appointed task, and, as agreed, found a letter from him at the post-office, Exeter, on my return home. The following extract from this epistle shows something of his feelings, and the experience of his first coach travelling in winter:—

"On Friday morning, after an unpleasant journey, I arrived at Plymouth, not without feeling much fatigue; the coach being bad, but the roads worse. The weather has been very unpleasant. I hope the latter part of your journey has proved better than the former. The remembrance of Ruan will never be eradicated from my memory. I am at present very busy learning perspective. When better qualified to draw buildings, I will visit Launceston, Tavistock, &c. and try to make some correct sketches which may be proper for the 'Beauties.' My father is much obliged for your attentions to me, as I am, though conscious of my own unworthiness. I hope you will favour me soon with the loan of a portfolio of drawings, which you kindly promised to lend me to copy," &c.

In May 1802 he again wrote, and sent me several sketches of Launceston, Tavistock, Oakenham Castle, and other places, manifesting very considerable improvement in perspective lines, proportions, and architectural details. "Some of these I have now before me: a few were engraved for the 'Beauties of England,' and others for a small publication called 'The Antiquarian and Topographical Cabinet.'" After some little negotiation it was agreed that he should visit London to prosecute his studies as an artist; and he came to reside, board, and lodge with me, in Wildermere-row, Clerkenwell, where he remained about two years. During that time he was employed in copying some of the best sketches and drawings I possessed, by Turner, Hearn, Alexander, Mackenzie, Cotman, and others. I introduced him to Northcote and to Benjamin West, the last of whom gave him most valuable and practical advice on the principles of light and shadow, by making a drawing of a ball or globe, on which were shown all the gradations and attributes of exhibiting rotund bodies on flat surfaces. It was a most valuable lesson, given in a few minutes, and accompanied by such theoretical and kind remarks as served to characterise the master, and make indelible impression on the head and heart of the pupil. Prout often referred to this important interview with gratitude and delight. I was a frequent visitor in Mr. West's painting-room, and occasionally took my young friend with me. In Mr. Northcote, being a native of the same county, and who delighted in talking about Devonshire, its artists, scenery, &c. Mr. Prout found a valuable and instructive companion and adviser. Haydon came and settled in London soon after Prout, and speedily attracted the notice of the young artists by his personal eccentricities and precocity of genius. Prout was on friendly terms with him, but never very familiar. There were but few traits of similitude of disposition in the two: one was modest, diffident, and mild; the other did not evince in his personal or professional character either of these amiable qualities. In 1803 and 1804 I employed my young protégé to visit the counties of Cambridge, Essex, and Wilts, to make sketches and studies of buildings, monuments, and scenery: my instructions, both verbal and written, were to be scrupulously accurate in the delineation of architectural and sculptural forms, proportions, and details; to make studies and notes of effects on the spot—also of light and shade. Many of the sketches, drawings, and manuscript notes he then made are now in my possession, and have often been referred to

and examined with sincere gratification. Some of the subjects have been engraved for the "Beauties," and others for the "Architectural Antiquities." In the year 1805 he returned home; chiefly on account of his health, as frequent attacks of bilious head-ache rendered him unfitted to prosecute his studies with ease, and any degree of energy.

I have several interesting letters from my old friend, some of which are well calculated to exemplify the amiable heart and the philosophical head of an artist whose life was one of much bodily suffering, of enthusiastic zeal in his profession, and of high moral integrity.

JOHN BRITTON.*

MATHEMATICAL EXERCISES.*

THE following will, perhaps, satisfy our correspondent "T. W. P. I." (p. 318, ante):—

1. Through a given point, between two given lines, to draw a line so that part of it intercepted between them may be bisected in that point.



Let AB, CB be the given lines, and D the given point (the same being nearer to CB than to AB). On CB demit the perpendicular DE, and prolong same to F, so that DF = DE. Through F draw a parallel to CB, meeting AB in G. Through G draw GD, and produce the same to meet CB in H. GH is the line required.

For because of the parallels FG and HE the alternate angles FGD and DHE are equal; and the opposite vertical angles at D are equal. Likewise FD is equal to DE by construction, therefore GD = DH.

Cor. From this construction it appears that if the two given lines are parallel, and the given point does not bisect the perpendicular to both, the problem is impossible.

And, if the given point does bisect such perpendicular, any line whatever drawn through the same, and terminated by the two given lines, will be bisected by such point.

It is also evident that any other line drawn from D to meet CB, not coinciding with DH, would equally answer the purpose.

And if D chanced to be in the line bisecting the angle ABC, the perpendicular to such bisecting line (drawn through D) would be the line required.

2. Dr. Lardner (in loco) points out, that Euclid, in dividing a line in medial section, first produces it, so that the rectangle of the given line together with the part produced, and the part produced, is equal to the square of the said given line, which is the point required to be proved. $X + Y$.

Second Question.—We must first cut the line in medial section (or in extreme and mean ratio, as it is called in the Book VI. Euclid), as shown in Prop. XI. Book II. or, in other words, must cut it, so that the rectangle contained by the whole line and one segment may be equal to the square of the other, and then show how the line composed of it and the larger segment is similarly divided.

Let AB be the given line, and on it describe the square ABCD. Bisect AC in E, produce

* We are glad to hear that our esteemed correspondent has made considerable progress towards the completion of his autobiography: he has printed eight or ten sheets since last issue, in which are given his Reminiscences of Bristol, Bath, Oxford, Birmingham, and Hereford, with many anecdotes of persons and places. The present Chancellor of the Exchequer, in recognition of early labours, has placed his name on the Pension List. The social Club, which grew out of the dinner given to Mr. Britton, at Richmond, a few years ago, have recommenced their meetings. At the first dinner, Mr. Charles Hill was host; and Mr. W. Tooke, Alderman Cabitt, Mr. Grissell, Dr. Conolly, Mr. N. Gould, Mr. Cunningham, and others, continue members. They have lost one much esteemed colleague, the late Mr. L. C. Hamfrey, Q.C. and have added one in the person of the Lord Chief Baron. Professor Donaldson, Mr. James Walker, the Rev. Baden Powell, &c. have been visitors.—Ed.

* We have to thank eleven correspondents for solutions of these questions.—Ed.